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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,866	05/25/2006	Stefan Haaks	2003P08367WOUS	7442

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SIEMENS CORPORATION
INTELLECTUAL PROPERTY DEPARTMENT
170 WOOD AVENUE SOUTH
ISELIN, NJ 08830

EXAMINER

RAO, SHEELA S

ART UNIT	PAPER NUMBER
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2128

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01/16/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/559,866	Applicant(s) HAAKS ET AL.	
	Examiner SHEELA RAO	Art Unit 2128	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/15/08 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to papers filed on 15 October 2008.
2. Claims 10-18 are pending and presented for examination.

Response to Amendment

3. The objection made to the drawings as failing to show elements as described in the specification is withdrawn in light of the changes made.
4. The objection made to the specification as failing to provide proper antecedence for the claimed subject matter is withdrawn in light of Applicant's comments.
5. The rejection of claims 10-18 under 35 USC §112, 2nd paragraph, is withdrawn in light of the amendments and response filed.
6. The rejection of claims 10-16 under 35 USC §102(b) as being anticipated by Eryurek et al. (US Patent Application Publication No. US 2003/0045962) is maintained and restated below.
7. The rejection of claim 17 under 35 USC §103(a) as being unpatentable over Eryurek et al. (US Patent Application Publication No. US 2003/0045962) is maintained and restated below.

8. The rejection of claim 18 under 35 USC §103(a) as being unpatentable over Eryurek et al. (US Patent Application Publication No. US 2003/0045962) in view of Lewis et al. (US Patent No. US 5,281,343 A) is maintained and restated below.

Claim Rejections

9. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

10. Claims 10-16 rejected under 35 U.S.C. 102(b) as being anticipated by US Patent Application Publication No. US 2003/0045962 A1 to Eryurek et al.

Independent claim 10 is directed to a method for increasing the capacity of an installation used to carry out an industrial process, comprising determining a plurality of process variables relevant for the capacity of the installation (paragraph [0002] defines the process variables); recording the process variables during changing operating conditions of the installation (paragraph [0014] describes the use of a microprocessor and its memory for storing data); determining a minimum control reserve of a plurality of control loops of the installation on the basis of the recorded process variables (paragraph [0009] teaches the use of a model to determine control information and the output of the process based upon the process variables); determining actions that increase the capacity of the installation, where the determined actions are based on the determined minimum control reserves (paragraph [0009] teaches the output of the model as being indicative of a quality measurement, wherein the model is later used to adjust setpoints accordingly; and implementing the actions resulting in an increase in

installation capacity (paragraph [0009] continues to explain how the data obtained from the model is used to 'implement' changes to the process setpoints or control algorithms accordingly).

Claim 11 further comprises the steps of defining a desired increase in the capacity of the installation, determining the control reserves in the control loops of the installation necessary for the desired capacity increase, and determining the control loops with a control reserve that is too small for the desired capacity increase.

Paragraph [0009] teaches that the model is used to provide measurements related to the product output and then uses this data to assess the quality of the process output.

In claim 12 the steps of investigation of the control loops with a control reserve that is too small and formulation of measures for producing the control reserves required in each case by relieving the load on the relevant control loops and/or by replacing components in the relevant control loops by higher- capacity components is claimed. Eryurek teaches this aspect of the instant invention in paragraph [0010] wherein a deviation in the product quality is detected prior to the actual production of the product and adjustments are made therefrom.

As per claim 13 the step of performing a technical and/or commercial evaluation of the potential actions are essentially carried through in the manufacturing techniques of the paper or paper pulp industry as per the prior art of reference as described beginning in paragraph [0009].

The core process being defined for determining the relevant process variables and interfaces of the core process with ancillary processes surrounding them being

investigated for an effect relationship with a process variable representing the capacity of the installation as claimed in claim 14 is taught in paragraph [0011] of the prior art reference.

Claim 15 defines the installation as an installation for execution of a continuous process such as the manufacture of paper, textiles, plastic or metal foils. Eryurek teaches such in paragraph [0001] as the described process is within a paper manufacturing environment.

Paragraph [0002] teaches the limitation of claim 16, wherein the capacity of the installation is determined by the speed of production on the production line is claimed.

11. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

12. Claim 17 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication No. US 2003/0045962 A1 to Eryurek et al.

The limitations of instant claims 10-16 as taught by Eryurek et al. is stated above.

Claim 17 defines the method according to claim 11 as executed by a service provider company. Although Eryurek does not specifically state the control process being executed by a service provider company, it is well known in the art for specific manufacturing and production companies to undertake the processing of certain products or processes for delivery to other industries. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have a paper manufacturing company produce the paper for another industry as it would involve an

innumerable amount of services and products for a non-paper manufacturer to produce paper, resulting in wasted time, expenses, and operations.

13. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent Application Publication No. US 2003/0045962 A1 to Eryurek et al., as applied to claims 10-16, and further in view of US Patent No. US 5,281,343 A to Lewis et al.

The limitations of instant claims 10-16 as taught by Eryurek et al. is stated above.

Claim 18 defines the process variables of claim 15 as being filtered approximately every 2 seconds and sampled approximately every 5 seconds when they are recorded. Eryurek teaches the production of paper but does not explicitly disclose the process of doing so with regard to filtering and sampling. However, the prior art by Lewis et al. teaches that in a paper manufacturing process, filtering and sampling of dispersed solids is a necessary requirement. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the aspects of the paper manufacturing process as per Lewis to the controlling method of Eryurek so as to teach the complete manufacturing of paper in a controlled process. The specific time limits as claimed is a design choice as it is well known to specify time constraints in different process controlling methods.

Response to Arguments

14. Applicant's arguments filed on October 15, 2008 have been fully considered but they are not persuasive.

Applicant argues that the reference of prior art has not taught the limitations of the instant invention as amended. These changes to the instant claims were made to the claims after submission of the prior Office action and were thus not included in the previous Office action. The aforementioned rejections have been amended to address the newly added elements.

In particular, claim 10 adds "determining actions that increase the capacity of the installation ..." to the elements of the instant claim. As stated above, paragraph [0009] teaches of a model that is used to model the output of a process based upon one or more (one being the minimal amount) process variables measured. It is then stated that this output is used to indicate a measurement which is related to the output obtained by the process. In the event that the output is not correct, then the setpoints are altered or adjusted so as to gain proper results which teach the step of "determining actions that increase the capacity of the installation ...". The added step of "implementing the actions resulting in an increase in installation capacity" is taught in the same paragraph as the adjustments are made accordingly and are used to coordinate and control actions based upon the measurements. Thus, the limitations of the instant invention as claimed are taught and/or fairly suggested by the prior arts of record.

Conclusion

15. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheela Rao whose telephone number is (571) 272-3751. The examiner can normally be reached Monday - Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamini Shah, can be reached on (571) 272-2279. The fax number for the organization where this application or any proceeding papers is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. It should be noted that status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see [http:// pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should any questions arise regarding access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kamini S Shah/

Supervisory Patent Examiner, Art Unit 2128

/SHEELA RAO/
Examiner, Art Unit 2128
January 14, 2009